Not All Cases Are Created Equal
Tailoring Cases to Meet Your Needs
Tammy Gutierrez, MD

Why Cases?
• More interesting
• Interactive learning
• Mirrors clinical reality
• Memorable
• Fun

What can we teach with a case?
• INFO: Basic scientific facts
• SKILLS: Hx and Physical, etc.
• ANALYSIS: Clinical Reasoning or Thought process
• AWARENESS: Broader picture/Reflection/Personal or Professional Development – learn something about yourself, gain insight into the system

How to frame it?
• Example of something to clarify or expand student understanding vs. Learner self-discovery – the “ah-hah” moment
• Review and practice previously learned material vs. de novo presentation of content
• Case as a single, self-contained experience, or does learning continue on outside the classroom experience?

Well, it depends…
• Who are your learners?
• Who are your teachers?
• What is the environment?
• What resources do you have?
• How much time do you have?

Getting started…
• Pick your points – write clear and achievable objectives for the case
• Gather your materials
• Know your audience (and your teachers)
• Select your format
• Make it count

HAVE FUN!
Start with you…

- Why are you writing this case?
  - Brainstorm list of teaching points/objectives for the case
  - What do you want learners to gain in the short-term? The long-term?
  - Do NOT limit yourself at this stage, be broad in your thinking

Reality Check

- What are your time limits? How many objectives can you REALISTICALLY cover?
  - Between patients in a busy clinic – likely 1
  - As a longitudinal small group course over 9 mos, maybe several
- Organize your list in order of importance
  - Try to tease out which items seem crucial to this particular learning opportunity, and which are less vital

Think about your audience

- Number of students
  - 1 on 1 vs. a lecture hall full of 200 students?
- Baseline knowledge level
  - Med 1 vs. Med 3 vs. resident?
  - What else are they learning right now?
  - What do they need to know for the case?
- What types of cases have they done before?
  - Do you want to be consistent with these, or do you want to shake things up a bit?

Think about your audience

- Do they know each other? Do they know you?
  - Students are generally more comfortable speaking in front of peers if they know each other already, especially important if the content matter is controversial or emotionally-charged.
- What are their goals for the session?
  - Focused on testable material
  - Clinical pearls
  - Improve their skills

Write your objectives

- Using what you now know about your audience, go back to your list of goals
- Which of the 4 categories (INFO, SKILLS, ANALYSIS, AWARENESS) are your goals designed to cover?
  - Ideally have one category (2 at most) that is primary focus of the case, unless it is a longitudinal case that evolves over several sessions.
  - Recommend only one new skill set or content area per case to maximize retention

Write your objectives

- Take a moment to start writing up some draft objectives.
- Ask yourself for each one:
  - How does this build on something the learner already knows?
  - Is this realistically achievable in the time I have for this case?
Know your teacher(s)
- Whether this is you or a large group of faculty, it is very important to know something about the instructor as well
  - Comfort level with the subject matter
  - Teaching style
  - Relationship with the learners

Know your resources
- Online case banks
- Video clips from TV or movies
- Case reports or personal accounts from journals
- Library
- Technology in the classroom – Turning point, online references, game show

Choose your format
- Biggest factor is teaching environment:
  - Large group
  - Small group
  - Clinical precepting
  - PBL or Team-based model

BUT – there is room for creativity

Overview of common formats
- “Case examples” – vignette or patient that clearly demonstrates a particular point you are trying to make to the students
  - Melissa, a 24 yo school teacher with 2 day hx of sore throat, large red tonsils with exudate and petechiae on exam, no cough or nasal sx, and a history of several cases of strep throat in her class last week.
  - Usually focus on INFO
  - No significant dilemma to solve
  - Works in any size group, Can be brief or long
  - Generally teacher-driven

Overview of common formats
- “Case discussions” – cases or situations that raise some dilemma or puzzle that needs to be solved by the learners
  - Typically presented as a clinical case, but could be newspaper article or other source
  -Usu INFO, ANALYSIS, AWARENESS, less SKILLS
  - Works in most size groups, tends to take at least moderate amt of time
  - Can be student- or teacher-driven
  - Can be verbal, written, video, online
  - Important to provide some closure at end

Overview of common formats
- Clinical role-plays – actual clinical scenario acted out by students, teacher(s), or standardized/actual patients
  - Great for SKILLS, can cover other objective areas as well
  - Usually NOT large group, can take long time
  - Generally student-driven
  - Can raise a dilemma or conflict for discussion
  - Easier in a group that knows each other
Overview of common formats

• Non-medical role-plays – Legal trial, Professionalism Council Hearing, Simulated ethics committee mtgs, etc. where students/teacher(s) take on non-medical roles to debate an issue
  – Typically Small Group, take a long time
  – Great for AWARENESS and ANALYSIS, some INFO
  – Generally student-driven
  – Can generate intense debate, easier in a group that knows each other

Develop your idea

• Personal experience
• Online
• Student/Resident experience
• Colleagues
• News
• Journals/etc.

Lecture: Reproductive Phys.

– Objectives: (INFO)
  • Use the case to introduce the concept of the hormonal signals involved in early pregnancy and the mechanism of action of hormonal contraceptive options.
  – Audience:
    • Med 2 – case simple, minimal jargon, perhaps change the patient to 19 year old pre-med student for greater identification
    • Resident – More participation, maybe they have to ask for patient hx before details are revealed

How would YOU teach it?

Lecture: Reproductive Phys.

– Teacher:
  • Can personalize this with case from your own clinic
  • Can walk the aisles, inviting student participation
  • Comfort with AV options
– Resources:
  • Can use turning point to elicit student interaction
  • Video clips to make the case more real
– Humanizing the concept makes lecture more interesting and shows students why they need to memorize the hormonal cycle.

Clinical rotation - Precepting

• Objectives:
  – INFO: Understand how morning-after pill works
  – SKILLS: Sexual hx taking
  – ANALYSIS: What makes this patient a good/NOT good candidate for the morning-after pill
  – AWARENESS: Cost/other issues for this patient? Barriers to her receiving appropriate contraception
– Audience:
  • Med 1,2 – likely focus more on either INFO or SKILL
  • Med 3,4 – moving more toward the Analysis
  • Resident – Focus on the how to give appropriate therapy and education to the patient

• Maria, a 16 year old young lady, comes in to clinic very anxious, with questions about the morning-after pill…
Clinical rotation - Precepting

- Teacher:
  - Extend teaching opportunities beyond the actual patient scenario: "What WOULD make her a good candidate for the morning after pill?" or "What would you do differently if she were 21? If she were 12? What if the sexual contact was NOT consensual?"

- Resources:
  - Engage student in looking up community resources for contraceptive access, safe sex education

In Small Group – M2

- Audience: 18 Med 2 students in PCM
- Objective: (SKILLS) Sexual history taking
  - Paper case of 18 yr old Maria requesting morning-after pill at visit to student health center, where med student is volunteering.
  - Standardized patient encounter to discuss taking a sexual history or to model adolescent interviewing techniques.
  - Discussion of video clip of Maria’s clinic encounter, perhaps done poorly, so that students can discuss what works and what does not in taking a sexual hx.

In Small Group – M3

- Audience: 10 Med 3 students on OB/GYN rotation, didactic session
- Objectives: (INFO,SKILLS) Understand basic contraceptive options, practice safe sex educ.
  - Role play with students practicing how to counsel “Maria” on safe sex, how to explain contraceptive options.
- Objectives: (AWARENESS) Spiritual/ethical conflicts in medicine.
  - Intro to class debate about physician spirituality, ethical/moral implications of providing contraception to patients in different situations.

In Small Group – Health Policy Elective

- Audience: 20 Med 4 and pharmacy students interested in health policy
- Objectives:
  - INFO – Process of drug becoming OTC
  - ANALYSIS – Critical eval of safety literature
  - Simulated FDA hearing about whether or not the morning-after pill should be approved for over-the-counter use, with students preparing their case ahead of time.

Longitudinal approach

- Audience: PBL-type group of Med 2 students
- Objectives:
  - INFO: contraception, morning-after pill use
  - SKILLS: sexual hx taking, screening for dom violence
  - ANALYSIS: practice formulating assessments, plans
  - AWARENESS: spiritual conflicts, community resources
  - PBL case with first session addressing the patient’s concern about the morning after pill.
  - Follow up demonstrates red flags for dom. violence, complicated social situation, with students assigned to learn more about community resources, interventions.
  - Could be done as a series of emailed cases for residents or discussion groups, as well.

Finishing touches

- Reel ’em in – Make sure your opening line has a hook to grab the learner's attention
- Personalize – The more personal details and dialogue, the more interesting the case is.
- Teaching notes – put some time and thought into prep for the teacher(s) (even if this is yourself)– it will pay off in the long run
- Make it count – provide some sort of follow-up assignment, or at least a summary to show students they learned something worthwhile.
  HAVE FUN!
Additional Resources

- National Center for Using Case Study Teaching in Science
  http://ublib.buffalo.edu/libraries/projects/cases/case.html
  http://ublib.buffalo.edu/libraries/projects/cases/teaching/teaching.html
  **this site has LOTS of great links to others as well**
- The Case Method and the Interactive Classroom (By John Foran)
  http://www2.nea.org/heheta01/images/s01p41.pdf
- Using Cases In Teaching (from Penn State)
  http://tl.lts.psu.edu/suggestions/cases/index.html